



DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648-XC954]

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to SouthCoast Wind Energy, LLC's Marine Site Characterization Surveys off Massachusetts and Rhode Island

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; issuance of an incidental harassment authorization.

SUMMARY: In accordance with the regulations implementing the Marine Mammal Protection Act (MMPA) as amended, notification is hereby given that NMFS has issued an incidental harassment authorization (IHA) to SouthCoast Wind Energy, LLC (SouthCoast Wind; formerly known as Mayflower Wind Energy, LLC) to incidentally harass marine mammals during marine site characterization surveys off Massachusetts and Rhode Island.

DATES: This Authorization is effective from May 12, 2023 through May 11, 2024.

FOR FURTHER INFORMATION CONTACT: Kelsey Potlock, Office of Protected Resources, NMFS, (301) 427-8401. Electronic copies of the original application and supporting documents (including NMFS **Federal Register** notices of the original proposed and final authorizations, and the previous IHA), as well as a list of the references cited in this document, may be obtained online at:

<https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act>. In case of problems accessing these documents, please call the contact listed above.

SUPPLEMENTARY INFORMATION:

Background

The MMPA prohibits the “take” of marine mammals, with certain exceptions. Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce (as delegated to NMFS) to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed incidental take authorization may be provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for taking for subsistence uses (where relevant). Further, NMFS must prescribe the permissible methods of taking and other “means of effecting the least practicable adverse impact” on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stocks for taking for certain subsistence uses (referred to in shorthand as “mitigation”); and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth.

The definitions of all applicable MMPA statutory terms cited above are included in the relevant sections below.

Summary of Request

On October 23, 2020, NMFS received a request from SouthCoast Wind seeking authorization to take marine mammals incidental to high-resolution geophysical site characterization surveys (HRG) off Massachusetts and Rhode Island in the area of Commercial Lease of Submerged Lands for Renewable Energy Development on the

Outer Continental Shelf Lease Area OCS-A-0521. Within this request, the applicant had requested authorization to harass (by Level B harassment only) up to 14 species of marine mammals (comprising 13 cetacean species and 1 collective pinniped guild). NMFS published notice of the proposed IHA in the **Federal Register** on March 1, 2021 (86 FR 11930). Following publication of the proposed IHA notice, SouthCoast Wind adjusted the proposed survey routes and submitted a modified IHA application to NMFS on April 19, 2021. Based on this modified application, an updated notice of proposed IHA was published in the **Federal Register** on May 20, 2021 (86 FR 27393). NMFS subsequently issued an IHA that was effective for a period of 1 year, from July 1, 2021 through June 30, 2022 (86 FR 38033, July 19, 2021).

On November 16, 2022, SouthCoast Wind submitted an application for a renewal IHA in order to complete the remaining subset of the planned survey activity that could not be completed under the 2021 IHA. This request was for the take of small numbers of 15 species of marine mammals (comprising 13 cetacean and 2 pinniped species), by Level B harassment only. Given the availability of updated marine mammal density information from Duke University's Marine Geospatial Ecology Laboratory (<https://seamap.env.duke.edu/models/Duke/EC/>) on June 20, 2022, NMFS determined that an IHA renewal was not appropriate in this circumstance. However, because the activity would otherwise qualify for a renewal of the initial IHA, *i.e.*, the scope of the activities, the survey location, the acoustic source use, and the level of impact expected to occur (*i.e.*, Level B harassment only) remain the same, NMFS relies substantially herein on the information previously presented in notices associated with issuance of the initial IHA (86 FR 11930, March 1, 2021; 86 FR 27393, May 20, 2021; 86 FR 38033, July 19, 2021).

Following additional discussions with NMFS, SouthCoast Wind submitted an updated request for a standard IHA on January 13, 2023 rather than a renewal IHA.

SouthCoast Wind's request covered the same activities (using the same sound sources), occurring in the same location, and the mitigation, monitoring, and reporting requirements are similar to those described in the **Federal Register** notice announcing the issuance of the 2021 IHA (86 FR 38033, July 19, 2021). The only changes are that the total number of survey days have been reduced, the number of vessels performing survey activities have been reduced, reduction in the assumed survey distance per day, and a reduction in total survey trackline as described in greater detail below. This updated request was deemed adequate and complete on January 24, 2023. No changes were made from the proposed to the final IHA.

Neither SouthCoast Wind, nor NMFS expect serious injury or mortality to result from this activity. Take by Level A harassment (injury) is considered unlikely, even absent mitigation, based on the characteristics of the signals produced by the acoustic sources planned for use.

Description of the Activity and Anticipated Impacts

Overview

SouthCoast Wind will conduct geotechnical and high-resolution geophysical (HRG) surveys in the Lease Area OCS-A-0521 and along potential submarine export cable routes (ECRs) to landfall locations in Falmouth, Massachusetts and Narragansett Bay, Rhode Island (refer back to Figure 1 in 88 FR 14335, March 8, 2023). The survey area is the same as that previously described in the application for the 2021 IHA (86 FR 27393, May 20, 2021; 86 FR 38033, July 19, 2021) and consists of approximately 127,388 acres (515.5 square kilometers (km²)) extending approximately 20 nautical miles (nmi, 38 kilometers (km)) offshore.

The purpose of these surveys are to acquire HRG and geotechnical data on the bathymetry, seafloor morphology, subsurface geology, environmental/biological sites, seafloor obstructions, soil conditions, and locations of any man-made, historical or

archaeological resources within the Lease Area and along the ECR corridor. Three survey vessels may operate concurrently as part of the surveys, running at a maximum speed of 3 to 4 knots (3.5 to 4.6 miles per hour). Additionally, a shallow-water vessel may survey the nearshore areas of the project location, but this would only occur during daylight hours and for a maximum of 12-hours daily. Up to 114 days of surveys are planned, with vessels operating for 24-hours as part of the planned surveys (Table 1).

Table 1 – Number of Survey Days that SouthCoast Wind Will Perform the Described HRG Survey Activities

Survey Location	Number of Days of Active Acoustic Source Use
Lease Area	39
Export Cable Routes	75
Total Number of Days	114

Underwater sound resulting from SouthCoast Wind's site characterization survey activities has the potential to result in incidental take of marine mammals in the form of behavioral harassment (*i.e.*, Level B harassment), specifically during use of certain acoustic sources operating at <180 kilohertz (kHz). SouthCoast requested the issuance of an IHA authorizing the take, by Level B harassment only, of 15 species of marine mammals (comprising 15 stocks) incidental to marine site characterization surveys, specifically in association with the use of HRG survey equipment.

A detailed description of the planned surveys by SouthCoast Wind are provided in the **Federal Register** notice of the proposed IHA (88 FR 14335, March 8, 2023). Since that time, no changes have been made to the survey activities. Therefore, a detailed description is not provided here. Please refer to that **Federal Register** notice for the description of the specified activities.

The mitigation, monitoring, and reporting measures are described in detail later in this document (please see **Mitigation** and **Monitoring and Reporting**).

Comments and Responses

A notice of NMFS' proposal to issue an IHA to SouthCoast Wind was published in the **Federal Register** on March 8, 2023 (88 FR 14335). That proposed notice described, in detail, SouthCoast Wind's proposed activities, the marine mammal species that may be affected by these activities, and the anticipated effects on marine mammals. In that notice, we requested public input on the request for authorization described therein, our analyses, the proposed authorization, and requested that interested persons submit relevant information, suggestions, and comments. This proposed notice was available for a 30-day public comment period.

NMFS received a comment letter from an environmental non-governmental organization (eNGO), Oceana, Inc. All comments, and NMFS' responses, are provided below, and the letter is available online on NMFS' website (<https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act>). Please review the comment letter for full details regarding the comments and associated rationale.

Comment 1: Oceana raised objections to NMFS' proposed renewal process for potential extension of the 1-year IHA with an abbreviated 15-day public comment period. Oceana recommended that an additional 30-day public comment period is necessary for any IHA renewal request.

Response: NMFS' IHA renewal process meets all statutory requirements. In prior responses to comments about IHA renewals (e.g., 84 FR 52464, October 2, 2019 and 85 FR 53342, August 28, 2020), NMFS explained the IHA renewal process is consistent with the statutory requirements contained in section 101(a)(5)(D) of the MMPA, and further promotes NMFS' goals of improving conservation of marine mammals and increasing efficiency in the MMPA compliance process. Therefore, we intend to continue to implement the existing renewal process.

All IHAs issued, whether an initial IHA or a renewal, are valid for a period of not more than 1 year. The public has 30 days to comment on proposed IHAs, with a cumulative total of 45 days for IHA renewals. The notice of the proposed IHA published in the **Federal Register** on March 8, 2023 (88 FR 14335) provided a 30-day public comment period and made clear that NMFS was seeking comment on the proposed IHA and the potential issuance of a renewal for this survey. As detailed in the **Federal Register** notice for the proposed IHA and on the agency's website, eligibility for renewal is determined on a case-by-case basis, renewals are subject to an additional 15-day public comment period, and the renewal is limited to up to another year of identical or nearly identical activities as described in the Description of Proposed Activities section of the proposed IHA notice or the activities described in the Description of Proposed Activities section of the proposed IHA notice would not be completed by the time the IHA expires and a renewal would allow for completion of the activities beyond that described in the Dates and Duration section of the proposed notice. NMFS' analysis of the anticipated impacts on marine mammals caused by the applicant's activities covers both the initial IHA period and the possibility of a 1-year renewal. Therefore, a member of the public considering commenting on a proposed initial IHA also knows exactly what activities (or subset of activities) would be included in a proposed renewal IHA, the potential impacts of those activities, the maximum amount and type of take that could be caused by those activities, the mitigation and monitoring measures that would be required, and the basis for the agency's negligible impact determinations, least practicable adverse impact findings, small numbers findings, and (if applicable) the no unmitigable adverse impact on subsistence use finding—all the information needed to provide complete and meaningful comments on a possible renewal at the time of considering the proposed initial IHA. Members of the public have the information needed to meaningfully

comment on both the immediate proposed IHA and a possible 1-year renewal, should the IHA holder choose to request one.

While there would be additional documents submitted with a renewal request, for a qualifying renewal these would be limited to documentation that NMFS would make available and use to verify that the activities are identical or nearly identical to those in the initial IHA such that the changes would have either no effect on impacts to marine mammals or decrease those impacts, or are a subset of activities already analyzed and authorized but not completed under the initial IHA. NMFS would also need to confirm, among other things, that the activities would occur in the same location; involve the same species and stocks; provide for continuation of the same mitigation, monitoring, and reporting requirements; and that no new information has been received that would alter the prior analysis. The renewal request would also contain a preliminary monitoring report, in order to verify that effects from the activities do not indicate impacts of a scale or nature not previously analyzed. The additional 15-day public comment period, which includes NMFS' direct notice to anyone who commented on the proposed initial IHA, provides the public an opportunity to review these few documents, provide any additional pertinent information, and comment on whether they think the criteria for a renewal have been met. Combined together, the 30-day public comment period on the initial IHA and the additional 15-day public comment period on the renewal of the same or nearly identical activities, provides the public with a total of 45 days to comment on the potential for renewal of the IHA.

In addition to the IHA renewal process being consistent with all requirements under section 101(a)(5)(D), it is also consistent with Congress' intent for issuance of IHAs to the extent reflected in statements in the legislative history of the MMPA. Through the description of the process and express invitation to comment on specific potential renewals in the Request for Public Comments section of each proposed IHA, the

description of the process on NMFS' website, further elaboration on the process through responses to comments such as these, posting of substantive documents on the agency's website, and provision of 30 or 45 days for public review and comment on all proposed initial IHAs and renewals respectively, NMFS has ensured that the public is "invited and encouraged to participate fully in the agency's decision-making process," as Congress intended.

Comment 2: Oceana stated that NMFS must utilize the best available scientific evidence, and suggested that NMFS has not done so, specifically referencing information regarding the North Atlantic right whale (NARW) such as updated population estimates, habitat usage in the survey area, and seasonality information. Oceana specifically asserted that NMFS is not using the best available scientific evidence with regards to the NARW population estimate.

Response: NMFS agrees the best available scientific evidence should be used for assessing NARW abundance estimates. Following the recent publication of NMFS' draft 2022 Stock Assessment Reports (SAR), NMFS updated the information relied upon herein accordingly. In prior responses to comments, NMFS has found that the SAR is the best available scientific evidence with respect to NARW population estimates (see *e.g.*, 87 FR 25452). We find no reason to reconsider or depart from this.

Moreover, the draft 2022 SARs report the same NARW abundance estimate (336) cited by Oceana in its public comment. We further note that this change in abundance estimate does not change the estimated take of NARWs or authorized take numbers, nor does it affect our ability to make the required findings under the MMPA for SouthCoast Wind's survey activities.

In sum, NMFS considered the best available scientific evidence regarding both recent habitat usage patterns for the study area and up-to-date seasonality information in the notice of the proposed IHA, including consideration of existing biologically important

areas (BIAs) and densities provided by Roberts and Halpin (2022). While the commenter has suggested that NMFS consider best available scientific evidence for recent habitat usage patterns and seasonality, the commenter has not offered any additional scientific information that it suggests should be considered best available scientific evidence.

Comment 3: Oceana noted that chronic stressors are an emerging concern for NARW conservation and recovery, and stated that chronic stress may result in energetic effects for NARWs. Oceana suggested that NMFS has not fully considered both the use of the area and the effects of both acute and chronic stressors on the health and fitness of NARWs, as disturbance responses in NARWs could lead to chronic stress or habitat displacement, leading to an overall decline in their health and fitness.

Response: NMFS agrees with Oceana that both acute and chronic stressors are of concern for NARW conservation and recovery. We recognize that acute stress from acoustic exposure is one potential impact of these surveys, and that chronic stress can have fitness, reproductive, *etc.* impacts at the population-level scale. NMFS has carefully reviewed the best available scientific information in assessing impacts to marine mammals, and recognizes that the surveys have the potential to impact marine mammals through behavioral effects, stress responses, and auditory masking. However, NMFS does not expect that the generally short-term, intermittent, and transitory marine site characterization survey activities planned by SouthCoast Wind will create conditions of acute or chronic acoustic exposure leading to long-term physiological stress responses in marine mammals. NMFS has prescribed a robust suite of mitigation measures, including extended distance shutdowns for NARW, that are expected to further reduce the duration and intensity of acoustic exposure, while limiting the potential severity of any possible behavioral disruption. The potential for chronic stress was evaluated in making the determinations presented in NMFS' negligible impact analyses.

SouthCoast Wind's survey area is near a known NARW foraging location in the New England region, as well as overlapping a small fraction of the migratory corridor used by NARW in a transitory manner for annual migratory activities. Given that the potential impacts for these types of surveys are expected to be low level, in part as a result of the brief periods where harassment-level noise exposure may be possible, we do not expect chronic effects to occur as a result of SouthCoast Wind's surveys. Furthermore, the limited range to the estimated harassment zone of the largest acoustic source (141 m) and the survey path within and near the SouthCoast Wind lease means that the area where NARWs are known to concentrate within Nantucket Shoals would not be impacted. Because of this, we do not expect effects to include reduced foraging opportunities for NARWs. Because of these reasons, NMFS does not expect acute or cumulative stress to be a detrimental factor to NARWs from SouthCoast Wind's described survey activities.

Lastly, NMFS does not find that the effects of SouthCoast Wind's survey may contribute to stunted growth rates as suggested by Oceana's comments. The activities associated with SouthCoast Wind's survey are outside the scope of activities described in the Stewart *et al.* (2021) paper, which finds that entanglements in fishing gear are associated with shorter whales. There is no evidence suggesting that the survey activities considered herein could have energetic effects similar to those caused by entanglement in fishing gear. Therefore, NMFS does not expect stunted growth rates to result from SouthCoast Wind's described survey activities.

Comment 4: Oceana asserted that NMFS must fully consider the discrete effects of each activity and the cumulative effects of the suite of approved, proposed, and potential activities on marine mammals and North Atlantic right whales in particular and ensure that the cumulative effects are not excessive before issuing or renewing an IHA.

Response: Neither the MMPA nor NMFS' codified implementing regulations call for consideration of other unrelated activities and their impacts on populations. The preamble for NMFS' implementing regulations (54 FR 40338, September 29, 1989) states in response to comments that the impacts from other past and ongoing anthropogenic activities are to be incorporated into the negligible impact analysis via their impacts on the baseline. Consistent with that direction, NMFS has factored into its negligible impact analysis the impacts of other past and ongoing anthropogenic activities via their impacts on the baseline, *e.g.*, as reflected in the density/distribution and status of the species, population size and growth rate, and other relevant stressors. The 1989 final rule for the MMPA implementing regulations also addressed public comments regarding cumulative effects from future, unrelated activities. There NMFS stated that such effects are not considered in making findings under section 101(a)(5) concerning negligible impact. In this case, this IHA, as well as other IHAs currently in effect or proposed within the specified geographic region, are appropriately considered an unrelated activity relative to the others. The IHAs are unrelated in the sense that they are discrete actions under section 101(a)(5)(D), issued to discrete applicants.

Section 101(a)(5)(D) of the MMPA requires NMFS to make a determination that the take incidental to a “specified activity” will have a negligible impact on the affected species or stocks of marine mammals. NMFS' implementing regulations require applicants to include in their request a detailed description of the specified activity or class of activities that can be expected to result in incidental taking of marine mammals (50 CFR 216.104(a)(1)). Thus, the “specified activity” for which incidental take coverage is being sought under section 101(a)(5)(D) is generally defined and described by the applicant. Here, SouthCoast Wind was the applicant for the IHA, and we are responding to the specified activity as described in that application (and making the necessary findings on that basis).

Through the response to public comments in the 1989 implementing regulations (54 FR 40338; September 29, 1989), NMFS also indicated (1) that we would consider cumulative effects that are reasonably foreseeable when preparing a National Environmental Protection Act (NEPA) analysis, and (2) that reasonably foreseeable cumulative effects would also be considered under section 7 of the Endangered Species Act (ESA) for listed species, as appropriate. Accordingly, NMFS has written an Environmental Assessments (EA) that addressed cumulative impacts related to substantially similar activities, in similar locations, *e.g.*, the 2019 Avangrid EA for survey activities offshore North Carolina and Virginia; the 2017 Ocean Wind, LLC EA for site characterization surveys off New Jersey; and the 2018 Deepwater Wind EA for survey activities offshore Delaware, Massachusetts, and Rhode Island. Cumulative impacts regarding issuance of IHAs for site characterization survey activities, such as those planned by SouthCoast Wind, have been adequately addressed under NEPA in prior environmental analyses that support NMFS' determination that this action is appropriately categorically excluded from further NEPA analysis. NMFS independently evaluated the use of a categorical exclusion (CE) for issuance of SouthCoast Wind's IHA, which included consideration of extraordinary circumstances.

Separately, the cumulative effects of substantially similar activities in the northwest Atlantic Ocean have been analyzed in the past under section 7 of the ESA when NMFS has engaged in formal intra-agency consultation, such as the 2013 programmatic Biological Opinion (BiOp) for BOEM Lease and Site Assessment Rhode Island, Massachusetts, New York, and New Jersey Wind Energy Areas (<https://repository.library.noaa.gov/view/noaa/29291>). Analyzed activities include those for which NMFS issued previous IHAs (82 FR 31562, July 7, 2017; 85 FR 21198, April 16, 2020; 86 FR 26465, May 10, 2021), which are similar to those planned by SouthCoast Wind under this current IHA request. This Biological Opinion determined

that NMFS' issuance of IHAs for site characterization survey activities associated with leasing, individually and cumulatively, are not likely to adversely affect listed marine mammals. NMFS notes that, while issuance of this IHA is covered under a different consultation, this BiOp remains valid.

Comment 5: Oceana states that NMFS must make an assessment of which activities, technologies, and strategies are truly necessary to achieve site characterization to inform development of the offshore wind projects and which are not critical, asserting that NMFS should prescribe the appropriate survey techniques. In general, Oceana stated that NMFS must require that all IHA applicants minimize the impacts of underwater noise to the fullest extent feasible, including through the use of best available technology and methods to minimize sound levels from geophysical surveys such as through the use of technically and commercially feasible and effective noise reduction and attenuation measures.

Response: The MMPA requires that an IHA include measures that will effect the least practicable adverse impact on the affected species and stocks and, in practice, NMFS agrees that the IHA should include conditions for the survey activities that will first avoid adverse effects on North Atlantic right whales in and around the survey site, where practicable, and then minimize the effects that cannot be avoided. NMFS has determined that the IHA meets this requirement to effect the least practicable adverse impact. As part of the analysis for all marine site characterization survey IHAs, NMFS evaluated the effects expected as a result of the specified activity, made the necessary findings, and prescribed mitigation requirements sufficient to achieve the least practicable adverse impact on the affected species and stocks of marine mammals. It is not within NMFS' purview to make judgments regarding what may be appropriate techniques or technologies for an operator's survey objectives.

Comment 6: Oceana states that SouthCoast Wind's activities will increase vessel traffic in and around the project area and that the IHA must include a vessel traffic plan to minimize the effects of increased vessel traffic.

Response: NMFS disagrees with Oceana's statement that the IHA must require a vessel traffic plan. During HRG surveys, there are no service vessels required. NMFS agrees that a vessel plan may be potentially appropriate for project construction, but it is not needed for marine site characterization surveys.

Comment 7: Oceana suggests that Protected Species Observers (PSOs) complement their survey efforts using additional technologies, such as infrared detection devices when in low-light conditions.

Response: NMFS agrees with Oceana regarding this suggestion and a requirement to utilize a thermal (infrared) device during low-light conditions was included in the proposed **Federal Register** notice. That requirement is included as a requirement of the issued IHA.

Comment 8: Oceana recommended that NMFS restrict all vessels of all sizes associated with the proposed survey activities to speeds less than 10 knots (kn) at all times due to the risk of vessel strikes to North Atlantic right whales and other large whales.

Response: While NMFS acknowledges that vessel strikes can result in injury or mortality, we have analyzed the potential for vessel strike resulting from SouthCoast Wind's activity and have determined that based on the nature of the activity and the required mitigation measures specific to vessel strike avoidance included in the IHA, potential for vessel strike is so low as to be discountable. The required mitigation measures, all of which were included in the proposed IHA and are now required in the final IHA, include: A requirement that all vessel operators comply with 10 kn (18.5 km/hour) or less speed restrictions in any seasonal management area (SMA), dynamic

management area (DMA), or Slow Zone while underway, and check daily for information regarding the establishment of mandatory or voluntary vessel strike avoidance areas (SMAs, DMAs, Slow Zones) and information regarding NARW sighting locations; a requirement that all vessels greater than or equal to 19.8 m in overall length operating from November 1 through April 30 operate at speeds of 10 kn (18.5 km/hour) or less; a requirement that all vessel operators reduce vessel speed to 10 kn (18.5 km/hour) or less when any large whale, any mother/calf pairs, pods, or large assemblages of non-delphinid cetaceans are observed near the vessel; a requirement that all survey vessels maintain a separation distance of 500 m or greater from North Atlantic right whales (100 m from any ESA-listed whales) or other unidentified large marine mammals visible at the surface while underway; a requirement that, if underway, vessels must steer a course away from any sighted ESA-listed whale at 10 kn or less until the 100 m minimum separation distance (or 500 m distance for North Atlantic right whales) has been established; a requirement that, if an ESA-listed whale is sighted in a vessel's path, or within 100 m of an underway vessel (500 m for a North Atlantic right whale), the underway vessel must reduce speed and shift the engine to neutral; and, a requirement that all vessels underway must maintain a minimum separation distance of 100 m from all other marine mammals (excluding North Atlantic right whales), with an understanding that at times this may not be possible (*e.g.*, for animals that approach the vessel). We have determined that the vessel strike avoidance measures in the IHA are sufficient to ensure the least practicable adverse impact on species or stocks and their habitat. Furthermore, no documented vessel strikes have occurred for any marine site characterization surveys which were issued IHAs from NMFS during the survey activities themselves or while transiting to and from survey sites.

Comment 9: Oceana suggests that NMFS require vessels maintain a separation distance of at least 500 m from North Atlantic right whales at all times.

Response: NMFS agrees with Oceana regarding this suggestion and a requirement to maintain a separation distance of at least 500 m from North Atlantic right whales at all times was included in the proposed **Federal Register** notice and was included as a requirement in the issued IHA.

Comment 10: Oceana recommended that the IHA should require all vessels supporting site characterization to be equipped with and use Class A Automatic Identification System (AIS) devices at all times while on the water. Oceana suggested this requirement should apply to all vessels, regardless of size, associated with the survey.

Response: NMFS is generally supportive of the idea that vessels involved with survey activities be equipped with and use Class A AIS devices at all times while on the water. Indeed, there is a precedent for NMFS requiring such a stipulation for geophysical surveys in the Atlantic Ocean (83 FR 63268, December 7, 2018); however, these seismic surveys carried the potential for much more significant impacts than the marine site characterization surveys planned by SouthCoast Wind. Given the comparatively small footprint of potential effects and correspondingly low level of concern regarding HRG survey activities, NMFS has determined that the operational costs associated with a requirement to so equip vessels not otherwise required to carry AIS are not warranted under the MMPA's least practicable adverse impact standard.

Comment 11: Oceana asserts that the IHA must include requirements to hold all vessels associated with site characterization surveys accountable to the IHA requirements, including vessels owned by the developer, contractors, employees, and others regardless of ownership, operator, and contract. They state that exceptions and exemptions will create enforcement uncertainty and incentives to evade regulations through reclassification and redesignation. They recommend that NMFS simplify this by requiring all vessels to abide by the same requirements, regardless of size, ownership, function, contract, or other specifics.

Response: NMFS agrees with Oceana and the proposed IHA and final IHA has general conditions to hold SouthCoast Wind and its designees (including vessel operators and other personnel) accountable while performing operations under the authority of the IHA. The plain language of the IHA indicates that the conditions contained therein apply to SouthCoast Wind and its designees. The IHA requires that a copy of the IHA must be in the possession of SouthCoast Wind, the vessel operators, the lead PSO, and any other relevant designees of SouthCoast Wind operating under the authority of this IHA. The IHA also states that SouthCoast Wind must ensure that the vessel operator and other relevant vessel personnel, including the PSO team, are briefed on all responsibilities, communication procedures, marine mammal monitoring protocols, operational procedures, and IHA requirements prior to the start of survey activity, and when relevant new personnel join the survey operations.

Comment 12: Oceana stated that the IHA must include a requirement for all phases of the site characterization to subscribe to the highest level of transparency, including frequent reporting to Federal agencies. Oceana recommends requirements to report all visual and acoustic detections of North Atlantic right whales and any dead, injured, or entangled marine mammals to NMFS or the Coast Guard as soon as possible and no later than the end of the PSO shift. Oceana states that to foster stakeholder relationships and allow public engagement and oversight of the permitting, the IHA should require all reports and data to be accessible on a publicly available website.

Response: NMFS agrees with the need for reporting and, indeed, the MMPA calls for IHAs to incorporate reporting requirements. As included in the proposed IHA, the final IHA includes requirements for reporting that supports Oceana's recommendations. SouthCoast Wind is required to submit a monitoring report to NMFS within 90 days after completion of survey activities that fully documents the methods and monitoring

protocols, summarizes the data recorded during monitoring. PSO datasheets or raw sightings data must also be provided with the draft and final monitoring report.

Further, the draft IHA and final IHA stipulate that if a North Atlantic right whale is observed at any time by any survey vessels, during surveys or during vessel transit, SouthCoast Wind must immediately report sighting information to the NMFS North Atlantic Right Whale Sighting Advisory System within 2 hours of occurrence, when practicable, or no later than 24 hours after occurrence. SouthCoast Wind may also report the sighting to the U.S. Coast Guard. Additionally, SouthCoast Wind must report any discoveries of injured or dead marine mammals to the Office of Protected Resources, NMFS, and to the New England/Mid-Atlantic Regional Stranding Coordinator as soon as feasible. This includes entangled animals. All reports and associated data submitted to NMFS are included on the website for public inspection.

Daily visual and acoustic detections of North Atlantic right whales and other large whale species along the Eastern Seaboard, as well as Slow Zone locations, are publicly available on WhaleMap (<https://whalemap.org/WhaleMap/>). Further, recent acoustic detections of North Atlantic right whales and other large whale species are available to the public on NOAA's Passive Acoustic Cetacean Map website <https://apps-nefsc.fisheries.noaa.gov/pacm/#/narw>. Given the open access to the resources described above, NMFS does not concur that public access to quarterly PSO reports is warranted and we have not included this measure in the authorization.

Comment 13: Oceana recommended increasing the Exclusion Zone to 1,000 m for North Atlantic right whales with requirements for HRG survey vessels to use PSOs and Passive Acoustic Monitoring (PAM) to establish and monitor these zones.

Response: NMFS notes that the 500 m Exclusion Zone for North Atlantic right whales exceeds the modeled distance to the largest 160 dB Level B harassment isopleth (141 m during sparker use) by a conservative margin to be extra cautious. Commenters

do not provide a compelling rationale for why the Exclusion Zone should be even larger. Given that these surveys are relatively low impact and that, regardless, NMFS has prescribed a precautionary North Atlantic right whale Exclusion Zone that is larger (500 m) than the conservatively estimated largest harassment zone (141 m), NMFS has determined that the Exclusion Zone is appropriate.

Regarding the use of acoustic monitoring to implement the exclusion zones, NMFS does not anticipate that acoustic monitoring would be effective for a variety of reasons discussed below and therefore has not required it in this IHA. As described in the mitigation section, NMFS has determined that the prescribed mitigation requirements are sufficient to effect the least practicable adverse impact on all affected species or stocks.

The commenters do not explain why they expect that PAM would be effective in detecting vocalizing mysticetes, nor does NMFS agree that this measure is warranted, as it is not expected to be effective for use in detecting the species of concern. It is generally accepted that, even in the absence of additional acoustic sources, using a towed passive acoustic sensor to detect baleen whales (including North Atlantic right whales) is not typically effective because the noise from the vessel, the flow noise, and the cable noise are in the same frequency band and will mask the vast majority of baleen whale calls. Vessels produce low-frequency noise, primarily through propeller cavitation, with main energy in the 5-300 hertz (Hz) frequency range. Source levels range from about 140 to 195 decibel (dB) re 1 μ Pa (micropascal) at 1 m (NRC, 2003; Hildebrand, 2009), depending on factors such as ship type, load, and speed, and ship hull and propeller design. Studies of vessel noise show that it appears to increase background noise levels in the 71-224 Hz range by 10-13 dB (Hatch *et al.*, 2012; McKenna *et al.*, 2012; Rolland *et al.*, 2012). PAM systems employ hydrophones towed in streamer cables approximately 500 m behind a vessel. Noise from water flow around the cables and from strumming of the cables themselves is also low frequency and typically masks signals in the same

range. Experienced PAM operators participating in a recent workshop (Thode *et al.*, 2017) emphasized that a PAM operation could easily report no acoustic encounters, depending on species present, simply because background noise levels rendered any acoustic detection impossible. The same workshop report stated that a typical eight-element array towed 500 m behind a vessel could be expected to detect delphinids, sperm whales, and beaked whales at the required range, but not baleen whales, due to expected background noise levels (including seismic noise, vessel noise, and flow noise).

There are several additional reasons why we do not agree that use of PAM is warranted for 24-hour HRG surveys. While NMFS agrees that PAM can be an important tool for augmenting detection capabilities in certain circumstances, its utility in further reducing impact during HRG survey activities is limited. First, for this activity, the area expected to be ensonified above the Level B harassment threshold is relatively small (a maximum of 141 m); this reflects the fact that, to start with, the source level is comparatively low and the intensity of any resulting impacts would be lower level and, further, it means that inasmuch as PAM will only detect a portion of any animals exposed within a zone, the overall probability of PAM detecting an animal in the harassment zone is low. Together these factors support the limited value of PAM for use in reducing take with smaller zones. PAM is only capable of detecting animals that are actively vocalizing and, many marine mammal species vocalize infrequently or during certain activities, which means that only a subset of the animals within the range of the PAM would be detected (and potentially have reduced impacts). Additionally, localization and range detection can be challenging under certain scenarios. For example, odontocetes are fast moving and often travel in large or dispersed groups which makes localization difficult.

Given that the effects to marine mammals from the types of surveys authorized in this IHA are expected to be limited to low level behavioral harassment even in the absence of mitigation, the limited additional benefit anticipated by adding this detection

method (especially for North Atlantic right whales and other low frequency cetaceans, species for which PAM has limited efficacy), and the cost and impracticability of implementing a full-time PAM program, we have determined the current requirements for visual monitoring are sufficient to ensure the least practicable adverse impact on the affected species or stocks and their habitat. NMFS has previously provided discussions on why PAM isn't a required monitoring measure during HRG survey IHAs in past **Federal Register** notices (see 86 FR 21289, April 22, 2021 and 87 FR 13975, March 11, 2022 for examples).

Comment 14: Oceana recommended that when HRG surveys are allowed to resume after a shutdown event, the surveys should be required to use a ramp-up procedure to encourage any nearby marine life to leave the area.

Response: NMFS agrees with this recommendation and included in the **Federal Register** notice of the proposed IHA (88 FR 14335, March 8, 2023) and this final IHA a stipulation that when technically feasible, survey equipment must be ramped up at the start or restart of survey activities. Ramp-up must begin with the power of the smallest acoustic equipment at its lowest practical power output appropriate for the survey. When technically feasible the power must then be gradually turned up and other acoustic sources added in a way such that the source level would increase gradually. NMFS notes that ramp-up would not be required for short periods where acoustic sources were shut down (*i.e.*, less than 30 minutes) if PSOs have maintained constant visual observation and no detections of marine mammals occurred within the applicable Exclusion Zones.

Description of Marine Mammals in the Area of Specified Activities

Sections 3 and 4 of the application summarize available information regarding status and trends, distribution and habitat preferences, and behavior and life history, of the potentially affected species. Additional information regarding population trends and threats may be found in NMFS's Stock Assessment Reports (SARs;

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>) and more general information about these species (e.g., physical and behavioral descriptions) may be found on NMFS's website (<https://www.fisheries.noaa.gov/find-species>).

Table 2 lists all species or stocks for which take is authorized for this action, and summarizes information related to the population or stock, including regulatory status under the MMPA and Endangered Species Act (ESA) and potential biological removal (PBR), where known. PBR is defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population (as described in NMFS's SARs). While no mortality is anticipated or authorized here, PBR and annual serious injury and mortality from anthropogenic sources are included here as gross indicators of the status of the species and other threats.

Marine mammal abundance estimates presented in this document represent the total number of individuals that make up a given stock or the total number estimated within a particular study or survey area. NMFS's stock abundance estimates for most species represent the total estimate of individuals within the geographic area, if known, that comprises that stock. For some species, this geographic area may extend beyond U.S. waters. All managed stocks in this region are assessed in NMFS' U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessment. All values presented in Table 2 are the most recent available at the time of publication, including from the draft 2022 SARs, and are available online at: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>.

Table 2 – Marine Mammals Likely To Occur in the Project Area That May Be Affected by SouthCoast Wind's Activity

Common Name	Scientific Name	Stock	ESA/MMPA status; strategic (Y/N) ¹	Stock abundance (CV, N _{min} , most recent	PBR ³	Annual M/SI ³
-------------	-----------------	-------	---	---	------------------	--------------------------

				abundance survey) ²		
<i>Order Artiodactyla – Cetacea – Mysticeti (baleen whales)</i>						
<i>Family Balaenidae</i>						
North Atlantic Right Whale	<i>Eubalaena glacialis</i>	Western North Atlantic	E, D, Y	338 (0, 332, 2020)	0.7	8.1
<i>Family Balaenopteridae (rorquals)</i>						
Fin Whale	<i>Balaenoptera physalus</i>	Western North Atlantic	E, D, Y	6,802 (0.24; 5,573; 2016)	11	1.8
Humpback Whale	<i>Megaptera novaeangliae</i>	Gulf of Maine	-, -, Y	1,396 (0; 1,380; 2016)	22	12.15
Minke Whale	<i>Balaenoptera acutorostrata</i>	Canadian Eastern Coastal	-, -, N	21,968 (0.31; 17,002; 2016)	170	10.6
Sei Whale	<i>Balaenoptera borealis</i>	Nova Scotia	E, D, Y	6,292 (1.02; 3,098; 2016)	6.2	0.8
<i>Odontoceti (toothed whales, dolphins, and porpoises)</i>						
<i>Family Physeteridae</i>						
Sperm Whale	<i>Physeter macrocephalus</i>	North Atlantic	E, D, Y	4,349 (0.28; 3451; 2016)	3.9	0
<i>Family Delphinidae</i>						
Atlantic Spotted Dolphin	<i>Stenella frontalis</i>	Western North Atlantic	-, -, N	39,921 (0.27; 32,032; 2016)	320	0
Atlantic White-Sided Dolphin	<i>Lagenorhynchus acutus</i>	Western North Atlantic	-, -, N	93,233 (0.71; 54,443; 2016)	544	27
Bottlenose Dolphin	<i>Tursiops truncatus</i>	Western North Atlantic - Offshore	-, -, N	62,851 b (0.23; 51,914; 2016)	519	28
Long-Finned Pilot Whale	<i>Globicephala melas</i>	Western North Atlantic	-, -, N	39,215 (0.3; 30,627; 2016)	306	29
Risso's Dolphin	<i>Grampus griseus</i>	Western North Atlantic	-, -, N	35,215 (0.19; 30,051; 2016)	301	34
Common Dolphin	<i>Delphinus delphis</i>	Western North Atlantic	-, -, N	172,947 (0.21; 145,216; 2016)	1452	390
<i>Family Phocoenidae (porpoises)</i>						
Harbor Porpoise	<i>Phocoena phocoena</i>	Gulf of Maine/ Bay of Fundy	-, -, N	95,543 (0.31; 74,034; 2016)	851	164
<i>Order Carnivora – Pinnipedia</i>						
<i>Family Phocidae (earless seals)</i>						
Gray Seal ⁴	<i>Halichoerus grypus</i>	Western North Atlantic	-, -, N	27,300 (0.22; 22,785; 2016)	1389	4453
Harbor Seal	<i>Phoca vitulina</i>	Western North Atlantic	-, -, N	61,336 (0.08; 57,637; 2018)	1729	339

1 - ESA status: Endangered (E), Threatened (T)/MMPA status: Depleted (D). A dash (-) indicates that the species is not listed under the ESA or designated as depleted under the MMPA. Under the MMPA, a strategic stock is one for which the level of direct human-caused mortality exceeds PBR or which is determined to be declining and likely to be listed under the ESA within the foreseeable future. Any species listed under the ESA is automatically designated under the MMPA as depleted and as a strategic stock.

2 - NMFS marine mammal stock assessment reports online at: www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments. CV is the coefficient of variation; N_{\min} is the minimum estimate of stock abundance. In some cases, CV is not applicable.

3 - These values, found in NMFS' SARs, represent annual levels of human-caused mortality plus serious injury from all sources combined (*e.g.*, commercial fisheries, ship strike).

4 - NMFS' gray seal stock abundance estimate (and associated PBR value) applies to U.S. population only. Total stock abundance (including animals in Canada) is approximately 450,000. The annual mortality and serious injury (M/SI) value given is for the total stock.

A detailed description of the species likely to be affected by SouthCoast Wind's activities, including information regarding population trends and threats, and local occurrence, were provided in the **Federal Register** notice for the proposed IHA (88 FR 14335; March 8, 2023). Since that time, we are not aware of any changes in the status of these species and stocks or other relevant new information; therefore, detailed descriptions are not provided here. Please refer to that **Federal Register** notice for those descriptions. Please also refer to NMFS's website (<https://www.fisheries.noaa.gov/find-species>) for generalized species accounts.

Marine Mammal Hearing

Hearing is the most important sensory modality for marine mammals underwater, and exposure to anthropogenic sound can have deleterious effects. To appropriately assess the potential effects of exposure to sound, it is necessary to understand the frequency ranges marine mammals are able to hear. Current data indicate that not all marine mammal species have equal hearing capabilities (*e.g.*, Richardson *et al.*, 1995; Wartzok and Ketten, 1999; Au and Hastings, 2008). To reflect this, Southall *et al.* (2007) recommended that marine mammals be divided into functional hearing groups based on directly measured or estimated hearing ranges on the basis of available behavioral response data, audiograms derived using auditory evoked potential techniques, anatomical modeling, and other data. Note that no direct measurements of hearing ability have been successfully completed for mysticetes (*i.e.*, low-frequency cetaceans). Subsequently, NMFS (2018) described generalized hearing ranges for these marine mammal hearing groups. Generalized hearing ranges were chosen based on the

approximately 65 decibel (dB) threshold from the normalized composite audiograms, with the exception for lower limits for low-frequency cetaceans where the lower bound was deemed to be biologically implausible and the lower bound from Southall *et al.* (2007) retained. Marine mammal hearing groups and their associated hearing ranges are provided in Table 3.

Table 3 – Marine Mammal Hearing Groups (NMFS, 2018)

Hearing Group	Generalized Hearing Range*
Low-frequency (LF) cetaceans (baleen whales)	7 Hz to 35 kHz
Mid-frequency (MF) cetaceans (dolphins, toothed whales, beaked whales, bottlenose whales)	150 Hz to 160 kHz
High-frequency (HF) cetaceans (true porpoises, <i>Kogia</i> , river dolphins, cephalorhynchid, <i>Lagenorhynchus cruciger</i> & <i>L. australis</i>)	275 Hz to 160 kHz
Phocid pinnipeds (PW) (underwater) (true seals)	50 Hz to 86 kHz
Otariid pinnipeds (OW) (underwater) (sea lions and fur seals)	60 Hz to 39 kHz

* Represents the generalized hearing range for the entire group as a composite (*i.e.*, all species within the group), where individual species' hearing ranges are typically not as broad. Generalized hearing range chosen based on ~65 dB threshold from normalized composite audiogram, with the exception for lower limits for LF cetaceans (Southall *et al.*, 2007) and PW pinniped (approximation).

The pinniped functional hearing group was modified from Southall *et al.* (2007) on the basis of data indicating that phocid species have consistently demonstrated an extended frequency range of hearing compared to otariids, especially in the higher frequency range (Hemilä *et al.*, 2006; Kastelein *et al.*, 2009; Reichmuth, 2013). For more detail concerning these groups and associated frequency ranges, please see NMFS (2018) for a review of available information.

Potential Effects of Specified Activities on Marine Mammals and Their Habitat

The effects of underwater noise from the deployed acoustic sources have the potential to result in behavioral harassment of marine mammals in the vicinity of the study area. The **Federal Register** notice for the proposed IHA (88 FR 14335, March 8, 2023) referenced the previous **Federal Register** notices (86 FR 11930, March 1, 2021; 86 FR 27393, May 20, 2021; 86 FR 38033, July 19, 2021) for a discussion of the effects of anthropogenic noise, ship strike, stress, and potential impacts on marine mammals and

their habitat. Therefore that information is not repeated here; please refer to those

Federal Register notices for that information.

Estimated Take

A detailed description of the acoustic sources planned for use and the methods used to estimate take anticipated to occur incidental to the project is found in the previous **Federal Register** notices (86 FR 11930, March 1, 2021; 86 FR 27393, May 20, 2021; 86 FR 38033, July 19, 2021). The acoustic sources that may result in take, as well as the associated source levels, estimated isopleth distances to the 160 dB Level B harassment threshold (maximum of 141 m), resulting estimated ensonified areas, and the methods of take estimation, including the use of group size adjustments and Protected Species Observer (PSO) data, remain applicable to this final notice and are unchanged from those described for the 2021 IHA. Therefore, this information is not repeated here and we refer the reader to the previous **Federal Register** notices for detailed descriptions (86 FR 27393, May 20, 2021; 86 FR 38033, July 19, 2021). The only exception to this is the incorporation of newly updated density information (Roberts *et al.*, 2016; Roberts and Halpin, 2022), available online at: <https://seamap.env.duke.edu/>. We refer the reader to Tables 1 and 2 in the ITA Request from SouthCoast Wind for specific density values used in the analysis, as found on our website (<https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-other-energy-activities-renewable>).

The authorized take can be found below in Table 4. Table 4 presents the results of SouthCoast's density-based calculations, estimated potential take numbers based on observational data presented in region-specific PSO reports, and mean group sizes from both NMFS' Atlantic Marine Assessment Program for Protected Species (AMAPPS) survey data and references presented by SouthCoast in its application. The largest value for each species, across these sources, was authorized. For comparative purposes, we

have provided the take that was previously authorized in the 2021 IHA (86 FR 38033, July 19, 2021). NMFS notes that take by Level A harassment was not requested, nor does NMFS anticipate that it could occur. Therefore, NMFS has not authorized any take by Level A harassment. No mortality or serious injury is anticipated to occur or authorized.

Table 4 – Total Authorized Takes, By Level B Harassment Only, Relative To Population Size For SouthCoast Wind’s 2023 HRG Surveys

Marine Mammal Species	Scientific Name	Stock	Estimated Population	Total Density-based Calculated Take	PSO Data Take Estimate	Mean Group Size		Take Authorized Under Previous 2021 IHA	Final 2023 IHA	
						SouthCoast Wind	AMAPPS		Authorized Takes	Percentage of Stock Abundance
Mysticetes										
Fin Whale	<i>Balaenoptera physalus</i>	Western North Atlantic	6,802	3.0	6.5	1.8	1.25	6	7	0.1
Humpback Whale	<i>Megaptera novaeangliae</i>	Gulf of Maine	1,396	2.3	55.3	2.0	1.6	33	55	3.94
Minke Whale	<i>Balaenoptera acutorostrata</i>	Canadian Eastern Coastal	21,968	12.9	12.1	1.2	1.12	14	13	0.06
North Atlantic Right Whale	<i>Eubalaena glacialis</i>	Western North Atlantic	338	5.5	0.2	2.4	1.58	9	6	1.78
Sei Whale	<i>Balaenoptera borealis</i>	Nova Scotia	6,292	1.3	1.0	1.6	1.21	6	2	0.03
Odontocetes										
Atlantic Spotted Dolphin	<i>Stenella frontalis</i>	Western North Atlantic	39,921	3.5	-	29	24.2	<i>n/a</i> ^a	29	0.07
Atlantic White-sided Dolphin	<i>Lagenorhynchus acutus</i>	Western North Atlantic	93,233	24.4	-	27.9	12.2	57	28	0.03
Bottlenose Dolphin	<i>Tursiops truncatus</i>	Western North Atlantic - Offshore	62,851	12.8	151.9	7.8	9.9	536	152	0.24
Common Dolphin	<i>Delphinus delphis</i>	Western North Atlantic	172,947	198.8	2,093.7	34.9	30.2	1,969	2,094	1.21
Harbor Porpoise	<i>Phocoena phocoena</i>	Gulf of Maine/ Bay of Fundy	95,543	83.2	0.2	2.7	2.5	46	83	0.09
Long-finned Pilot Whale	<i>Globicephala melas</i>	Western North Atlantic	39,215	1.7	4.4	8.4	8.2	27	8	0.02

Risso's Dolphin	<i>Grampus griseus</i>	Western North Atlantic	35,215	2.0	-	5.4	7.3	18	7	0.01
Sperm Whale	<i>Physeter macrocephalus</i>	N Atlantic	4,349	0.9	0.3	1.5	1.7	6	2	0.04
Pinnipeds										
Harbor Seal	<i>Phoca vitulina</i>	Western North Atlantic	61,336	74.2	2.3	1.4	<i>n/a</i> ^c	<i>n/a</i> ^b	74	0.12
Gray Seal	<i>Halichoerus grypus</i>	Western North Atlantic	27,300 ^d	166.7	38.7	1.4	<i>n/a</i> ^c	<i>n/a</i> ^b	167	0.04 ^d

a – No takes for this species were authorized in the 2021 IHA (86 FR 38033, July 19, 2021).

b – In the 2021 IHA (86 FR 38033, July 19, 2021), both seal species were combined into a single guild of 718 total authorized takes.

c – No AMAPPS data was available for seals.

d – NMFS' stock abundance estimate (and associated PBR value) applies to U.S. population only. Total stock abundance (including animals in Canada) is approximately 451,600. This value was used in the percentage of stock abundance estimated to be taken by the project.

Mitigation, Monitoring and Reporting Measures

The required mitigation, monitoring, and reporting measures are similar to those described in the **Federal Register** notice announcing issuance of the 2021 IHA (86 FR 38033, July 19, 2021; with the exception discussed below), and the discussion of the least practicable adverse impact included in that document remains accurate.

Following issuance of the 2021 IHA to SouthCoast Wind, NMFS' Greater Atlantic Regional Fisheries Office (GARFO) concluded a programmatic informal consultation regarding wind energy development-related surveys conducted in three Atlantic Renewable Energy Regions (<https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-take-reporting-programmatics-greater-atlantic#offshore-wind-site-assessment-and-site-characterization-activities-programmatic-consultation>). Therefore, in addition to the mitigation, monitoring, and reporting measures prescribed through the 2021 IHA (86 FR 38033, July 19, 2021), SouthCoast Wind will be required to adhere to relevant Project Design Criteria (PDC) described in the GARFO consultation document (specifically PDCs 4, 5, and 7). The following measures are required for inclusion in this IHA.

Visual Monitoring and Shutdown Zones

NMFS-approved visual observers must be used. During survey operations (*e.g.*, any day on which use of the sparker source is planned to occur, and whenever the sparker source is in the water, whether activated or not), a minimum of one visual marine mammal observer (*i.e.*, PSO) must be on duty on each source vessel and conducting visual observations at all times during daylight hours (*i.e.*, from 30 minutes prior to sunrise through 30 minutes following sunset). A minimum of two PSOs must be on duty on each source vessel during nighttime hours. Visual monitoring must begin no less than 30 minutes prior to ramp-up (described below) and must continue until one hour after use of the sparker source ceases.

Visual PSOs will coordinate to ensure 360° visual coverage around each vessel from the most appropriate observation posts and shall conduct visual observations using binoculars and the naked eye while free from distractions and in a consistent, systematic, and diligent manner. PSOs will establish and monitor applicable shutdown zones (see below). These zones will be based upon the radial distance from the sparker source (rather than being based around the vessel itself).

Two shutdown zones are defined, depending on the species and context. Here, an extended shutdown zone encompassing the area at and below the sea surface out to a radius of 500 meters from the sparker source (0–500 meters) is defined for North Atlantic right whales. For all other marine mammals, the shutdown zone encompasses a standard distance of 100 meters (0-100 meters). Any observations of marine mammals by crew members aboard any vessel associated with the survey will be relayed to the PSO team.

Visual PSOs will be on watch for a maximum of 4 consecutive hours followed by a break of at least 1 hour between watches and may conduct a maximum of 12 hours of observation per 24-hour period.

Pre-Start Clearance and Ramp-up

A ramp-up procedure, involving a gradual increase in source level output, is required at all times as part of the activation of the sparker source when technically feasible. Operators will ramp up sparkers to half power for 5 minutes and then proceed to full power. A 30-minute pre-start clearance observation period will occur prior to the start of ramp-up. The intent of pre-start clearance observation (30 minutes) is to ensure no marine mammals are within the shutdown zones prior to the beginning of ramp-up. The intent of ramp-up is to warn marine mammals of pending operations and to allow sufficient time for those animals to leave the immediate vicinity. All operators will adhere to the following pre-start clearance and ramp-up requirements:

- The operator will notify a designated PSO of the planned start of ramp-up

as agreed upon with the lead PSO; the notification time should not be less than 60 minutes prior to the planned ramp-up in order to allow the PSOs time to monitor the shutdown zones for 30 minutes prior to the initiation of ramp-up (pre-start clearance). During this 30 minute pre-start clearance period the entire shutdown zone must be visible, except as indicated below.

- Ramp-ups will be scheduled so as to minimize the time spent with the source activated.
- A visual PSO conducting pre-start clearance observations will be notified again immediately prior to initiating ramp-up procedures and the operator must receive confirmation from the PSO to proceed.
- Any PSO on duty has the authority to delay the start of survey operations if a marine mammal is detected within the applicable pre-start clearance zone.
- The operator will establish and maintain clear lines of communication directly between PSOs on duty and crew controlling the acoustic source to ensure that mitigation commands are conveyed swiftly while allowing PSOs to maintain watch.
- The pre-start clearance requirement is waived for small delphinids and pinnipeds. Detection of a small delphinid (individual belonging to the following genera of the Family Delphinidae: *Steno*, *Delphinus*, *Lagenorhynchus*, *Stenella*, and *Tursiops*) or pinniped within the shutdown zone will not preclude beginning of ramp-up, unless the PSO confirms the individual to be of a genus other than those listed, in which case normal pre-clearance requirements apply.
- If there is uncertainty regarding identification of a marine mammal species (*i.e.*, whether the observed marine mammal(s) belongs to one of the delphinid genera for which the pre-clearance requirement is waived), PSOs will use best professional judgment in making the decision to call for a shutdown.
- Ramp-up will not be initiated if any marine mammal to which the prestart

clearance requirement applies is within the shutdown zone. If a marine mammal is observed within the shutdown zone during the 30 minute pre-start clearance period, ramp-up will not begin until the animal(s) has been observed exiting the zones or until an additional time period has elapsed with no further sightings (30 minutes for all baleen whale species and sperm whales and 15 minutes for all other species).

- PSOs will monitor the shutdown zones 30 minutes before and during ramp-up, and ramp-up must cease and the source must be shut down upon observation of a marine mammal within the applicable shutdown zone.

- Ramp-up will occur at times of poor visibility, including nighttime, if appropriate visual monitoring has occurred with no detections of marine mammals in the 30 minutes prior to beginning ramp-up. Sparker activation will only occur at night where operational planning cannot reasonably avoid such circumstances.

- If the acoustic source is shut down for brief periods (*i.e.*, less than 30 minutes) for reasons other than implementation of prescribed mitigation (*e.g.*, mechanical difficulty), it may be activated again, without ramp-up, if PSOs have maintained constant visual observation and no detections of marine mammals have occurred within the applicable shutdown zone. For any longer shutdown, pre-start clearance observation and ramp-up are required.

Shutdown

All operators will adhere to the following shutdown requirements:

- Any PSO on duty has the authority to call for shutdown of the sparker source if a marine mammal is detected within the applicable shutdown zone.
- The operator will establish and maintain clear lines of communication directly between PSOs on duty and crew controlling the source to ensure that shutdown commands are conveyed swiftly while allowing PSOs to maintain watch.
- When the sparker source is active and a marine mammal appears within or enters

the applicable shutdown zone, the source will be shut down. When shutdown is instructed by a PSO, the source will be immediately deactivated and any dispute resolved only following deactivation.

- The shutdown requirement is waived for small delphinids and pinnipeds. If a small delphinid (individual belonging to the following genera of the Family Delphinidae: *Steno*, *Delphinus*, *Lagenorhynchus*, *Stenella*, and *Tursiops*) or pinniped is visually detected within the shutdown zone, no shutdown is required unless the PSO confirms the individual to be of a genus other than those listed, in which case a shutdown is required.
- If there is uncertainty regarding identification of a marine mammal species (*i.e.*, whether the observed marine mammal(s) belongs to one of the delphinid genera for which shutdown is waived or one of the species with a larger shutdown zone), PSOs will use best professional judgment in making the decision to call for a shutdown.
- Upon implementation of shutdown, the source will be reactivated after the marine mammal has been observed exiting the applicable shutdown zone or following a clearance period (30 minutes for all baleen whale species and sperm whales and 15 minutes for all other species) with no further detection of the marine mammal.

If a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized number of takes have been met, approaches or is observed within the Level B harassment zone, shutdown will occur.

Vessel Strike Avoidance

Crew and supply vessel personnel will use an appropriate reference guide that includes identifying information on all marine mammals that may be encountered. Vessel operators will comply with the below measures except under extraordinary circumstances when the safety of the vessel or crew is in doubt or the safety of life at sea is in question. These requirements do not apply in any case where compliance would create an

imminent and serious threat to a person or vessel or to the extent that a vessel is restricted in its ability to maneuver and, because of the restriction, cannot comply.

- Vessel operators and crews will maintain a vigilant watch for all marine mammals and slow down, stop their vessel, or alter course, as appropriate and regardless of vessel size, to avoid striking any marine mammal. A single marine mammal at the surface may indicate the presence of submerged animals in the vicinity of the vessel; therefore, precautionary measures should always be exercised. A visual observer aboard the vessel must monitor a vessel strike avoidance zone around the vessel (species-specific distances detailed below). Visual observers monitoring the vessel strike avoidance zone will be third-party observers (*i.e.*, PSOs) or crew members, but crew members responsible for these duties must be provided sufficient training to: (1) distinguish marine mammal from other phenomena and (2) broadly to identify a marine mammal as a right whale, other whale (defined in this context as sperm whales or baleen whales other than right whales), or other marine mammals.

- All vessels, regardless of size, will observe a 10-knot speed restriction in specific areas designated by NMFS for the protection of North Atlantic right whales from vessel strikes. These include all Seasonal Management Areas (SMA) (when in effect), any dynamic management areas (DMA) (when in effect), and Slow Zones. See www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-shipstrikes-north-atlantic-right-whales for specific detail regarding these areas.

- Vessel speeds will also be reduced to 10 knots or less when mother/calf pairs, pods, or large assemblages of cetaceans are observed near a vessel.

- All vessels will maintain a minimum separation distance of 500 m from right whales. If a right whale is sighted within the relevant separation distance, the vessel will steer a course away at 10 knots or less until the 500-m separation distance has been established. If a whale is observed but cannot be confirmed as a species other than a right

whale, the vessel operator will assume that it is a right whale and take appropriate action.

- All vessels will maintain a minimum separation distance of 100 m from sperm whales and all other baleen whales.
- All vessels will, to the maximum extent practicable, attempt to maintain a minimum separation distance of 50 m from all other marine mammals, with an understanding that at times this may not be possible (*e.g.*, for animals that approach the vessel).
- When marine mammals are sighted while a vessel is underway, the vessel will take action as necessary to avoid violating the relevant separation distance (*e.g.*, attempt to remain parallel to the animal's course, avoid excessive speed or abrupt changes in direction until the animal has left the area, reduce speed and shift the engine to neutral). This does not apply to any vessel towing gear or any vessel that is navigationally constrained.

Members of the PSO team will consult NMFS' North Atlantic right whale reporting system and Whale Alert, daily and as able, for the presence of North Atlantic right whales throughout survey operations, and for the establishment of DMAs and/or Slow Zones. It is SouthCoast Wind's responsibility to maintain awareness of the establishment and location of any such areas and to abide by these requirements accordingly.

PSOs

SouthCoast Wind will use independent, dedicated, trained PSOs, meaning that the PSOs will be employed by a third-party observer provider, will have no tasks other than to conduct observational effort, collect data, will communicate with and instruct relevant vessel crew with regard to the presence of marine mammal and mitigation requirements (including brief alerts regarding maritime hazards), and will have successfully completed an approved PSO training course for geophysical surveys. Visual monitoring will be

performed by qualified, NMFS-approved PSOs. PSO resumes will be provided to NMFS for review and approval prior to the start of survey activities.

PSO names will be provided to NMFS by the operator for review and confirmation of their approval for specific roles prior to commencement of the survey. For prospective PSOs not previously approved, or for PSOs whose approval is not current, NMFS will review and approve PSO qualifications. Resumes should include information related to relevant education, experience, and training, including dates, duration, location, and description of prior PSO experience. Resumes must be accompanied by relevant documentation of successful completion of necessary training.

NMFS may approve PSOs as conditional or unconditional. A conditionally approved PSO may be one who is trained but has not yet attained the requisite experience. An unconditionally-approved PSO is one who has attained the necessary experience. For unconditional approval, the PSO must have a minimum of 90 days at sea performing the role during a geophysical survey, with the conclusion of the most recent relevant experience not more than 18 months previous.

At least one of the visual PSOs aboard the vessel will be unconditionally approved. One unconditionally-approved visual PSO shall be designated as the lead for the entire PSO team. This lead should typically be the PSO with the most experience, who would coordinate duty schedules and roles for the PSO team and serve as primary point of contact for the vessel operator. To the maximum extent practicable, the duty schedule will be planned such that unconditionally-approved PSOs are on duty with conditionally-approved PSOs.

PSOs will successfully complete relevant training, including completion of all required coursework and passing (80 percent or greater) a written and/or oral examination developed for the training program.

PSOs will have successfully attained a bachelor's degree from an accredited

college or university with a major in one of the natural sciences, a minimum of 30 semester hours or equivalent in the biological sciences, and at least one undergraduate course in math or statistics. The educational requirements may be waived if the PSO has acquired the relevant skills through alternate experience. Requests for such a waiver shall be submitted to NMFS and must include written justification. Alternate experience that may be considered includes, but is not limited to (1) secondary education and/or experience comparable to PSO duties; (2) previous work experience conducting academic, commercial, or government-sponsored marine mammal surveys; and (3) previous work experience as a PSO (PSO must be in good standing and demonstrate good performance of PSO duties).

SouthCoast Wind will work with the selected third-party PSO provider to ensure PSOs have all equipment (including backup equipment) needed to adequately perform necessary tasks, including accurate determination of distance and bearing to observed marine mammals, and to ensure that PSOs are capable of calibrating equipment as necessary for accurate distance estimates and species identification. Such equipment, at a minimum, will include:

- At least one thermal (infrared) image device suited for the marine environment;
- Reticle binoculars (*e.g.*, 7 x 50) of appropriate quality (at least one per PSO, plus backups);
- Global Positioning Units (GPS) (at least one plus backups);
- Digital cameras with a telephoto lens that is at least 300-mm or equivalent on a full-frame single lens reflex (SLR) (at least one plus backups). The camera or lens should also have an image stabilization system;
- Equipment necessary for accurate measurement of distances to marine mammal;
- Compasses (at least one plus backups);
- Means of communication among vessel crew and PSOs; and

- Any other tools deemed necessary to adequately and effectively perform PSO tasks.

The equipment specified above will be provided by an individual PSO, the third-party PSO provider, or the operator, but SouthCoast Wind is responsible for ensuring PSOs have the proper equipment required to perform the duties specified in the final IHA.

The PSOs will be responsible for monitoring the waters surrounding the survey vessel to the farthest extent permitted by sighting conditions, including shutdown zones, during all HRG survey operations. PSOs will visually monitor and identify marine mammals, including those approaching or entering the established shutdown zones during survey activities. It will be the responsibility of the PSO(s) on duty to communicate the presence of marine mammals as well as to communicate the action(s) that are necessary to ensure mitigation and monitoring requirements are implemented as appropriate.

PSOs will be equipped with binoculars and have the ability to estimate distance and bearing to detect marine mammals, particularly in proximity to shutdown zones. Reticulated binoculars will also be available to PSOs for use as appropriate based on conditions and visibility to support the sighting and monitoring of marine mammals. During nighttime operations, night-vision goggles with thermal clip-ons and infrared technology will be available for use. Position data will be recorded using hand-held or vessel GPS units for each sighting.

During good conditions (*e.g.*, daylight hours; Beaufort sea state (BSS) 3 or less), to the maximum extent practicable, PSOs will also conduct observations when the acoustic source is not operating for comparison of sighting rates and behavior with and without use of the active acoustic sources. Any observations of marine mammals by crew members aboard the vessel associated with the survey will be relayed to the PSO team.

Data on all PSO observations will be recorded based on standard PSO collection requirements. This will include dates, times, and locations of survey operations; dates and times of observations, location and weather; details of marine mammal sightings (*e.g.*, species, numbers, behavior); and details of any observed marine mammal behavior that occurs (*e.g.*, noted behavioral disturbances).

Reporting

SouthCoast Wind will submit a draft summary report on all activities and monitoring results within 90 days of the completion of the survey or expiration of the IHA, whichever comes sooner. The report will describe all activities conducted and sightings of marine mammals, will provide full documentation of methods, results, and interpretation pertaining to all monitoring, and will summarize the dates and locations of survey operations and all marine mammals sightings (dates, times, locations, activities, associated survey activities). The draft report will also include geo-referenced, timestamped vessel tracklines for all time periods during which acoustic sources were operating. Tracklines should include points recording any change in acoustic source status (*e.g.*, when the sources began operating, when they were turned off, or when they changed operational status such as from full array to single gun or vice versa). GIS files will be provided in Environmental Systems Research Institute, Inc. (ESRI) shapefile format and include the Universal Time Coordinated (UTC) date and time, latitude in decimal degrees, and longitude in decimal degrees. All coordinates will be referenced to the WGS84 geographic coordinate system. In addition to the report, all raw observational data will be made available. The report will summarize the information. A final report will be submitted within 30 days following resolution of any comments on the draft report. All draft and final marine mammal monitoring reports will be submitted to *PR.ITP.MonitoringReports@noaa.gov* and *nmfs.gar.incidental-take@noaa.gov*.

PSOs will use standardized electronic data forms to record data. PSOs will record

detailed information about any implementation of mitigation requirements, including the distance of marine mammal to the acoustic source and description of specific actions that ensued, the behavior of the animal(s), any observed changes in behavior before and after implementation of mitigation, and if shutdown was implemented, the length of time before any subsequent ramp-up of the acoustic source. If required mitigation was not implemented, PSOs will record a description of the circumstances. At a minimum, the following information will be recorded:

1. Vessel name (source vessel), vessel size and type, maximum speed capability of vessel;
2. Dates of departures and returns to port with port name;
3. PSO names and affiliations;
4. Date and participants of PSO briefings;
5. Visual monitoring equipment used;
6. PSO location on vessel and height of observation location above water surface;
7. Dates and times (Greenwich Mean Time) of survey on/off effort and times corresponding with PSO on/off effort;
8. Vessel location (decimal degrees) when survey effort begins and ends and vessel location at beginning and end of visual PSO duty shifts;
9. Vessel location at 30-second intervals if obtainable from data collection software, otherwise at practical regular interval;
10. Vessel heading and speed at beginning and end of visual PSO duty shifts and upon any change;
11. Water depth (if obtainable from data collection software);
12. Environmental conditions while on visual survey (at beginning and end of PSO shift and whenever conditions change significantly), including BSS and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to

the horizon;

13. Factors that may contribute to impaired observations during each PSO shift change or as needed as environmental conditions change (*e.g.*, vessel traffic, equipment malfunctions).

14. Survey activity information (and changes thereof), such as acoustic source power output while in operation, number and volume of airguns operating in an array, tow depth of an acoustic source, and any other notes of significance (*i.e.*, pre-start clearance, ramp-up, shutdown, testing, shooting, ramp-up completion, end of operations, streamers, *etc.*).

15. Upon visual observation of any marine mammal, the following information will be recorded:

- a. Watch status (sighting made by PSO on/off effort, opportunistic, crew, alternate vessel/platform);
- b. Vessel/survey activity at time of sighting (*e.g.*, deploying, recovering, testing, shooting, data acquisition, other);
- c. PSO who sighted the animal;
- d. Time of sighting;
- e. Initial detection method;
- f. Sightings cue;
- g. Vessel location at time of sighting (decimal degrees);
- h. Direction of vessel's travel (compass direction);
- i. Speed of the vessel(s) from which the observation was made;
- j. Identification of the animal (*e.g.*, genus/species, lowest possible taxonomic level or unidentified); also note the composition of the group if there is a mix of species;
- k. Species reliability (an indicator of confidence in identification);
- l. Estimated distance to the animal and method of estimating distance; m. Estimated number of animals (high/low/best);

- m. Estimated number of animals by cohort (adults, yearlings, juveniles, calves, group composition, *etc.*);
- n. Description (as many distinguishing features as possible of each individual seen, including length, shape, color, pattern, scars, or markings, shape and size of dorsal fin, shape of head, and blow characteristics);
- o. Detailed behavior observations (*e.g.*, number of blows/breaths, number of surfaces, breaching, spyhopping, diving, feeding, traveling; as explicit and detailed as possible; note any observed changes in behavior before and after point of closest approach);
- p. Mitigation actions; description of any actions implemented in response to the sighting (*e.g.*, delays, shutdowns, ramp-up, speed or course alteration, *etc.*) and time and location of the action;
- q. Equipment operating during sighting;
- r. Animal's closest point of approach and/or closest distance from the center point of the acoustic source; and
- s. Description of any actions implemented in response to the sighting (*e.g.*, delays, shutdown, ramp-up) and time and location of the action.

If a North Atlantic right whale is observed at any time by PSOs or personnel on the project vessel, during surveys or during vessel transit, SouthCoast Wind will report the sighting information to the NMFS North Atlantic Right Whale Sighting Advisory System (866-755-6622) within 2 hours of occurrence, when practicable, or no later than 24 hours after occurrence. North Atlantic right whale sightings in any location will also be reported to the U.S. Coast Guard via channel 16 and through the WhaleAlert app (www.whalealert.org).

In the event that personnel involved in the survey activities discover an injured or dead marine mammal, the incident will be reported to NMFS as soon as feasible by

phone (866-755-6622) and by email (*nmfs.gar.stranding@noaa.gov* and *PR.ITP.MonitoringReports@noaa.gov*). The report will include the following information:

1. Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
2. Species identification (if known) or description of the animal(s) involved;
3. Condition of the animal(s) (including carcass condition if the animal is dead);
4. Observed behaviors of the animal(s), if alive;
5. If available, photographs or video footage of the animal(s); and,
6. General circumstances under which the animal was discovered.

In the event of a ship strike of a marine mammal by any vessel involved in the activities, SouthCoast Wind will report the incident to NMFS by phone (866-755-6622) and by email (*nmfs.gar.stranding@noaa.gov* and *PR.ITP.MonitoringReports@noaa.gov*) as soon as feasible. The report will include the following information:

1. Time, date, and location (latitude/longitude) of the incident;
2. Species identification (if known) or description of the animal(s) involved;
3. Vessel's speed during and leading up to the incident;
4. Vessel's course/heading and what operations were being conducted (if applicable);
5. Status of all sound sources in use;
6. Description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike;
7. Environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, visibility) immediately preceding the strike;
8. Estimated size and length of animal that was struck;
9. Description of the behavior of the marine mammal immediately preceding and/or

following the strike;

10. If available, description of the presence and behavior of any other marine mammals immediately preceding the strike;

11. Estimated fate of the animal (*e.g.*, dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared); and,

12. To the extent practicable, photographs or video footage of the animal(s).

Determinations

SouthCoast Wind's HRG survey activities are unchanged from those analyzed in support of the 2021 IHA, with the exception of reductions in survey effort and vessels. The effects of the activity, taking into consideration the mitigation and related monitoring measures, remain unchanged from those evaluated in support of the 2021 IHA, regardless of the minor increases in estimated take numbers for some marine mammal species and/or stocks. Specifically, only Level B harassment has been authorized, which NMFS expects would be of a lower severity, predominately in the form of avoidance of the sound sources that may cause a temporary abandonment of the location during active source use that may result in a temporary interruption of foraging activities for some species. However, NMFS does not expect that this effect will long-term or permanent as the acoustic source would be mobile and leave the area within a specific amount of time for which the animals could return to the area. Even considering the increased estimated take for some species, the impacts of these lower severity exposures are not expected to accrue to a degree that the fitness of any individuals would be impacted, and therefore, no impacts on the annual rates of recruitment or survival would result.

As discussed in the previous **Federal Register** notices (86 FR 27393, May 20, 2021; 86 FR 38033, July 19, 2021), SouthCoast Wind's project will occur approximately 50 miles (80.5 km) west of the feeding BIAs for North Atlantic right whales (February – April) and sei whales (May-November) and approximately 40 miles (64.4 km) west of

feeding BIAs for humpback whales (March – December) and fin whales (March – October). The Narragansett Bay cable route corridor is located just to the north of another fin whale BIA (March-October) south of Martha's Vineyard. These BIAs are extensive and sufficiently large (705 km² and 3,149 km² for North Atlantic right whales; 47,701 km² for humpback whales; 2,933 km² for fin whales; and 56,609 km² for sei whales), and the acoustic footprint of the planned survey is sufficiently small (141 m using the sparker), such that feeding opportunities for these whales would not be reduced appreciably. Furthermore, given SouthCoast Wind's reduced vessel presence, the reduced daily vessel tracks, and the reduced number of days for the project, NMFS expects any impacts from this project to be less than were expected in association with the previous 2021-2022 project.

NMFS has also reviewed current information regarding active Unusual Mortality Events (UMEs) and important habitat, and finds that the discussion provided for the 2021 IHA remains applicable to this final IHA. Therefore, in conclusion, there is no new information suggesting that our analysis or findings should change.

Based on the information contained here and in the referenced documents, NMFS has determined the following: (1) the required mitigation measures will effect the least practicable impact on marine mammal species or stocks and their habitat; (2) the authorized takes will have a negligible impact on the affected marine mammal species or stocks; (3) the authorized takes represent small numbers of marine mammals relative to the affected stock abundances; (4) SouthCoast Wind's activities will not have an unmitigable adverse impact on taking for subsistence purposes as no relevant subsistence uses of marine mammals are implicated by this action, and (5) appropriate monitoring and reporting requirements are included.

Endangered Species Act (ESA)

Section 7(a)(2) of the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 et seq.) requires that each Federal agency insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. To ensure ESA compliance for the issuance of IHAs, NMFS Office of Protected Resources (OPR) consults internally whenever we propose to authorize take for endangered or threatened species.

NMFS OPR has authorized the incidental take of four species of marine mammals which are listed under the ESA, including the North Atlantic right, fin, sei, and sperm whale, and has determined that these activities fall within the scope of activities analyzed in GARFO's programmatic consultation regarding geophysical surveys along the U.S. Atlantic coast in the three Atlantic Renewable Energy Regions (completed June 29, 2021; revised September 2021). The consultation concluded that NMFS' issuance of incidental take authorization related to these activities are not likely to adversely affect ESA-listed marine mammals.

National Environmental Policy Act

To comply with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq.*) and NOAA Administrative Order (NAO) 216-6A, NMFS must review our action (*i.e.*, the issuance of an IHA) with respect to potential impacts on the human environment. This action is consistent with categories of activities identified in Categorical Exclusion B4 (IHAs with no anticipated serious injury or mortality) of the Companion Manual for NOAA Administrative Order 216-6A, which do not individually or cumulatively have the potential for significant impacts on the quality of the human environment and for which we have not identified any extraordinary circumstances that would preclude this categorical exclusion. Accordingly, NMFS has determined that the

issuance of the final IHA qualifies to be categorically excluded from further NEPA review.

Authorization

As a result of these determinations, NMFS has issued an IHA to SouthCoast Wind for conducting site characterization surveys off Massachusetts and Rhode Island from May 12, 2023 through May 11, 2024, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. The final IHA and SouthCoast Wind's IHA application can be found on NMFS' website at <https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act>.

Dated: May 12, 2023.

Catherine Marzin,

Deputy Director, Office of Protected Resources,

National Marine Fisheries Service.